

Work Order ID 60644



Page 1

Thursday, July 15, 2010 11:28:04 AM

Item ID: D3947-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Panel, Lower LH Post

Start Date: 7/15/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 7/22/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date: 10/7/15 Tooling:

Date:

Run Start



QC:

Date: SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3947	A

100



HAND FINISHING THERMOFORMING

0.00

XI BB 10/07/19

HandThermo

Memo

0.00

Hand Finishing Thermoforming

Cut Blanks to fit frame size

105



Dry Material

0.00

XI BB 10/07/19

HandThermo

Memo

0.00

Hand Finishing Thermoforming

Dry Sheet as per QSI022 POLYCARBONATE

Temp: 240 F

Time IN: 4:30PM 10/07/18

Time OUT: 7:00AM 10/07/19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 60644

Page 2

Thursday, July 15, 2010 11:28:04 AM

Item ID: D3947-3

Accept



Setup

Start



Revision ID:

Item Name: Panel, Lower LH Post

Stop



Start Date: 7/15/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 7/22/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop


**Sequence ID/
Work Center ID**
**Operation
Description**
Set Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

110



THERMOFORMING MACHINE

Thermoform

Thermoforming Machine

Memo

0.00

1-Machine Set-up

2-Pre-heat tool

3-Thermoform as per Dwg. D3947-3 and Folio FTA 046 using tool DT9484

Dwg. Rev. AFolio Rev. B

120



QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Quality Control

Memo

0.00

Visually inspect for proper formation of each part

X1 BB
10/07/19

130



QC8- Inspect parts - second check

0.00

QC

Quality Control

Memo

0.00

X1 BB 10/07/19

10/07/19

AB 10-07-22 xO

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 60644

Thursday, July 15, 2010 11:28:04 AM



Page 3

Item ID: D3947-3

Accept



Setup Start

Barcode

Revision ID:

Item Name: Panel, Lower LH Post

Start Date: 7/15/2010 **Start Qty:** 1.00



Cust Item ID:

Required Date: 7/22/2010 **Req'd Qty:** 1.00



Customer:

Reference:

Approvals:

Date: _____ Tooling

Date: _____

QC:

Date: **SPC (Y/N):**

Date: _____

Run Start

— 1 —

Stop

1111111111

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3947-3 PAR #: Fault Category: Thermo Forming NCR: Yes No DQA Date: 10/07/28
 Resolution: Accepted Disposition: Use as is QA: N/C Closed Date: 10/07/28

WORK ORDER NON-CONFORMANCE (NCR)								
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/07/28	ISD	FLANGES THINNER THAN DRAWING - SEE FAI. L.C Process	10/07/28	SEE E-MAIL ATTACH From David S. to Chris P. Accepted by Eng.	10/07/28	S	10/07/28	S 10/07/28

NOTE: Date & initial all entries

Work Order ID 60644

Page 4

Thursday, July 15, 2010 11:28:04 AM

Item ID: D3947-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Panel, Lower LH Post

Start Date: 7/15/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 7/22/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop


**Sequence ID/
Work Center ID**
**Operation
Description**
Set Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170

Identify as per dwg & Stock Location: 160

0.00

Packaging

Memo

0.00

Packaging

180



QC21- Final Inspection - Work Order Release

0.00

QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 1

Thursday, July 15, 2010 11:28:08 AM

Work Order ID: 60644



Parent Item: D3947-3



Parent Item Name: Panel, Lower LH Post

Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA: New issue DD verified by:EC
Add Step 105 Dry Material 10/04/21 DL

Ipp Rev B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.093-F6006-07		Purchased	No			100	sf	1,876.541	3.444	3.625263			

GE PLASTICS LEXAN SHEET



Location	Loc Qty	Loc Code
therm	1876.541	
107574	13.72	
111973	30.875	
112176	101.2267	
114459	1730.7193	

IX BB 10/07/16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	60644
Description: Panel, Lower LH	Part Number:	D3947-3
Inspection Dwg: D3947	Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than "	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured

Date: 10/37/22

TRIMMING SECTION

Measured by:

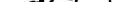
Date: 10/07/22

Audited by: S

Date: 10/07/08

Prototype Approval: N/A

Date: N/A

Rev	Date	Change	Revised by	Approved
A	09.09.15	New Issue	KJ	

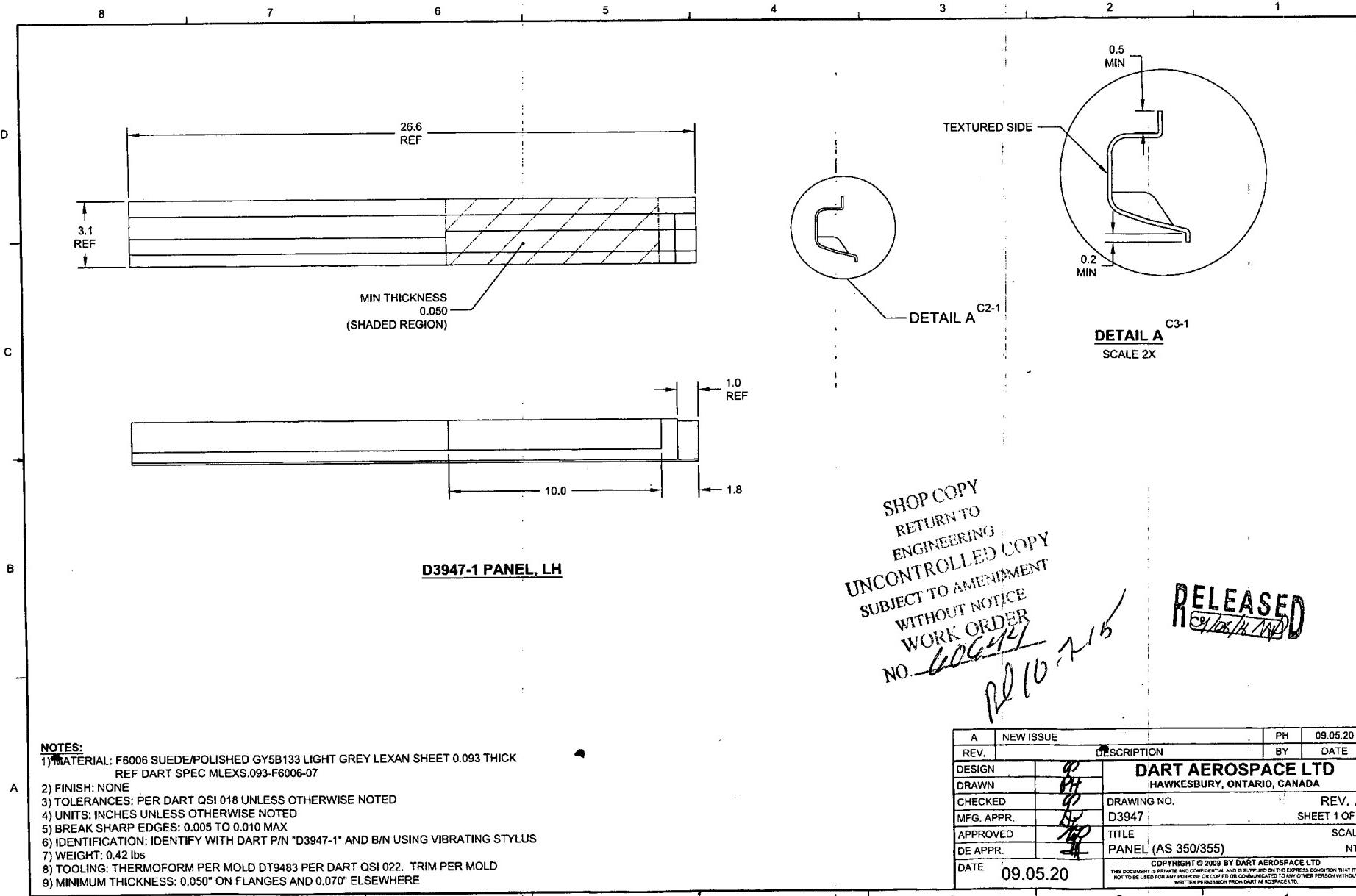
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NOTE: Date & initial all entries



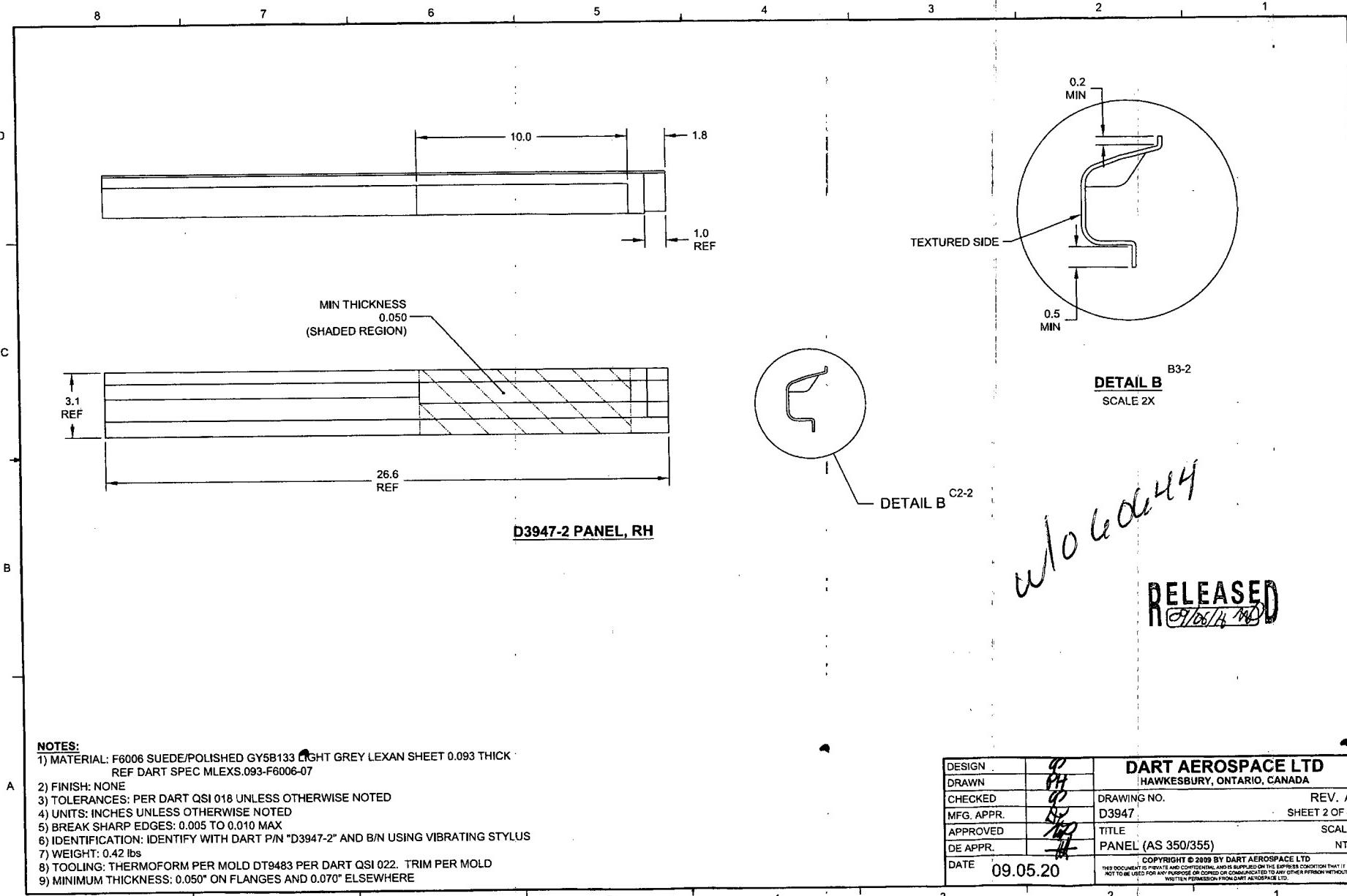
A	NEW ISSUE	PH	09.05.20
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>PP</i>	DART AEROSPACE LTD	
DRAWN	<i>PP</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>PP</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>PP</i>	D3947	SHEET 1 OF 4
APPROVED	<i>PP</i>	TITLE	SCALE
DE APPR.	<i>PP</i>	PANEL (AS 350/355)	NTS
DATE	09.05.20	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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NOTE: Date & initial all entries



DESIGN	9	DART AEROSPACE LTD
DRAWN	PH	HAWKESBURY, ONTARIO, CANADA
CHECKED	PP	REV. A
MFG. APPR.	SP	DRAWING NO. D3947 SHEET 2 OF 4
APPROVED	MP	TITLE
DE APPR.	HP	SCALE
DATE	09.05.20	PANEL (AS 350/355) NTS

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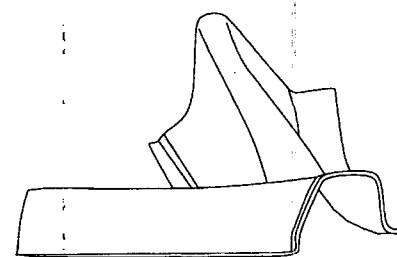
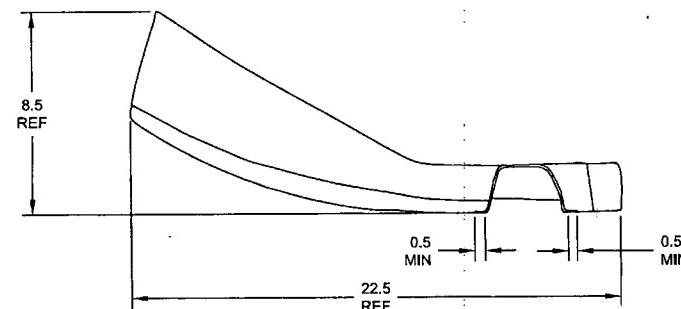
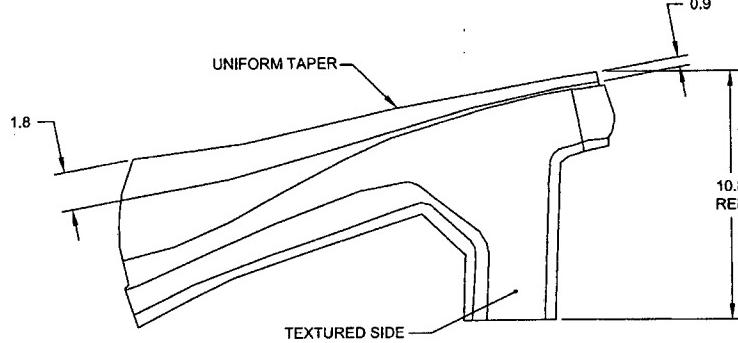
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NOTE: Date & initial all entries



W/6 10/6/14

RELEASED
09/06/14

D3947-3 PANEL, LH

NOTES:

- 1) MATERIAL: F6006 SUEDE/POLISHED GY5B133 LIGHT GREY LEXAN SHEET 0.093 THICK
REF DART SPEC MLEXS.093-F6006-07
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3947-3" AND B/N USING VIBRATING STYLUS
- 7) WEIGHT: 0.55 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9484 PER DART QSI 022. TRIM PER MOLD
- 9) MINIMUM THICKNESS: 0.050" ON FLANGES AND 0.065" ELSEWHERE

DESIGN	<i>PP</i>	DART AEROSPACE LTD	
DRAWN	<i>PH</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>PP</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>PP</i>	D3947	SHEET 3 OF 4
APPROVED	<i>PP</i>	TITLE	SCALE
DE APPR.	<i>PP</i>	PANEL (AS 350/355)	NTS
DATE	09.05.20	COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PROPERTY AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

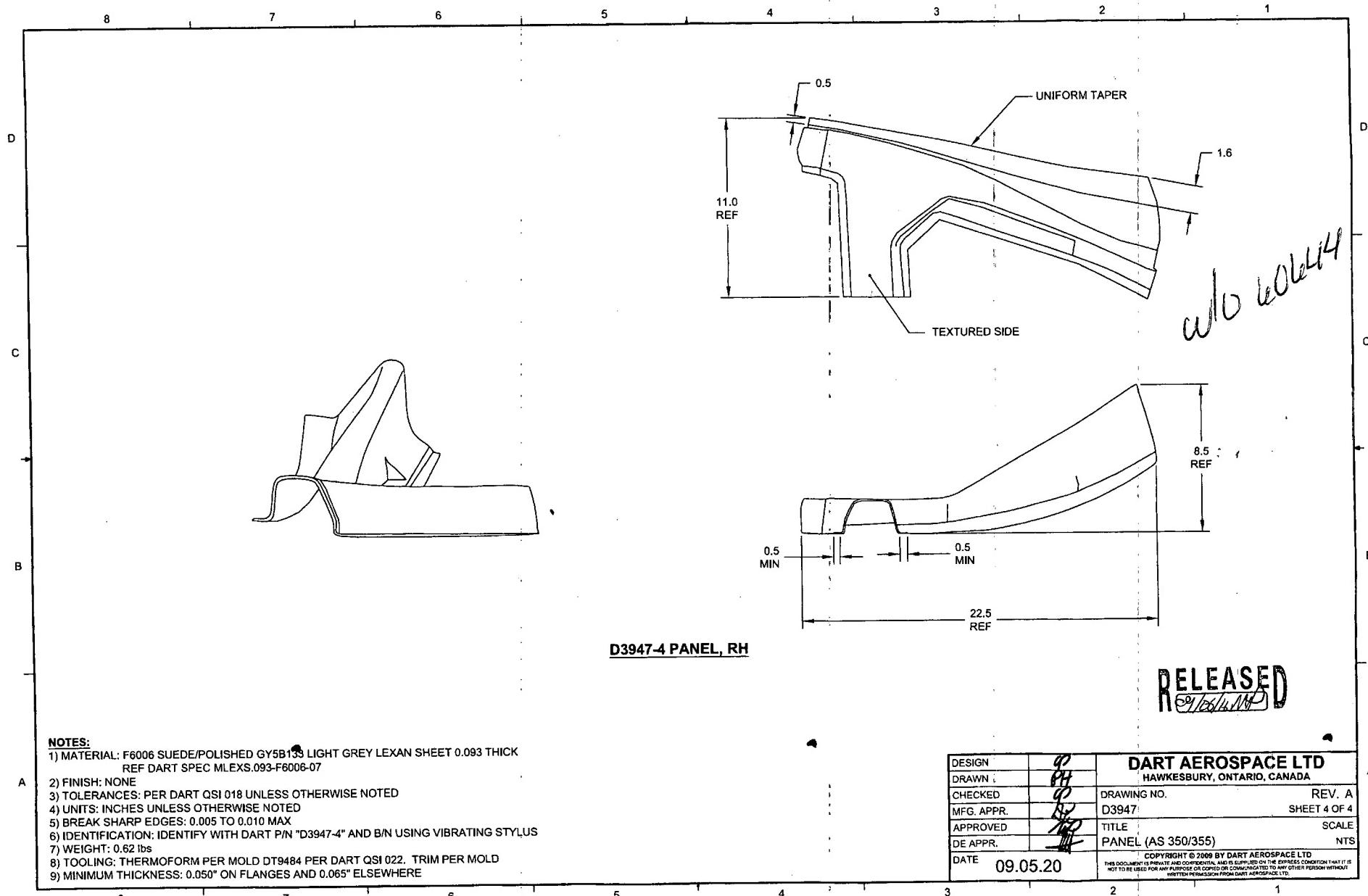
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NOTE: Date & initial all entries

Daryl Leger

From: David Shepherd [dshepherd@dartaero.com]
Sent: Wednesday, July 28, 2010 10:57 AM
To: 'Chris Provencal'
Cc: 'Mike Petsche'; 'Daryl L Leger'; 'L Lacelle'; 'Jason Murdoch'
Subject: RE: NCR D3947-3/-4

Chris,

Based on your assessment below, these parts are acceptable.
A copy of this email should be attached to the work order in question.

David

From: Chris Provencal [mailto:cprovencal@dartaero.com]
Sent: Thursday, July 22, 2010 9:29 AM
To: 'David Shepherd'
Cc: 'Mike Petsche'
Subject: NCR D3947-3/-4

RE: 350 Interior Trim Panels, D3947-3/-4

This is the lower door post panel that was recently approved. The thickness of the flanges that insert into the seal is 0.040" MIN instead of the 0.050" MIN from the dwg. They say they're using the same program. They attribute this to the panels being dried for longer.

Based on TR-D350-766-2 Rev. A, the panel was pulled at least 10X more than the req'd loading. Considering the ratio of flange x-sectional inertia would be $0.05^3/0.04^3 = 2$, the flange should still be sufficiently strong hold the panel in place.

Is this acceptable?

Chris

No virus found in this incoming message.
Checked by AVG - www.avg.com
- Version: 8.5.441 / Virus Database: 271.1.1/3020 - Release Date: 07/22/10 06:36:00